People from South Asian communities face an increased risk of Type 2 diabetes and the risk starts at a younger age than for their white counterparts. As the UK population becomes ever more diverse and population growth from ethnic minority communities increases, the burden of Type 2 diabetes could increase dramatically. Farhana Darwich, BAME Reach & Impacts Project Officer in the Engaging Communities team at Diabetes UK, introduces Awareness to Action, a new initiative that aims to address this challenge.
Diabetes UK aims to support everyone affected by diabetes. In regard to Type 2 diabetes, we work to delay, prevent and manage the condition. Across the UK, 12.3 million people are at increased risk of developing Type 2 diabetes, and this figure is on the rise. The good news is that three out of five cases can be delayed or prevented, predominately through lifestyle changes. We work towards supporting people to eat better, move more and manage their weight through behaviour change initiatives. This means both a focus on building an environment where the healthy choice is the easy choice, and supporting individuals to change their behaviour.

Preventing Type 2 diabetes in ethnically diverse populations

Black, Asian and minority ethnic (BAME) populations are at increased risk of developing Type 2 diabetes, and are vulnerable from a younger age compared with White Europeans, due to their ethnic origin. In the UK, we have an ethnically diverse population, rich in both culture and tradition. Large multiracial populations are the norm for several of our towns and cities. At the time of the last UK-wide Census in 2011, the BAME population accounted for just over 8 million people, or one in eight of the UK population. Analysis also showed that 80% of the population growth in the UK is from ethnic minority communities.

South Asian and black population groups form the first and second largest ethnic minority groups in the UK, respectively, totalling just under 5 million people. Other population groups, such as Chinese, Arabs or mixed ethnic groups are excluded from this figure, though we know that Type 2 diabetes has substantially increased in recent decades in both China and across the Arab nations. The two- to four-fold increased risk of Type 2 diabetes in people of both South Asian and black ethnicities presents all of us, including Diabetes UK and the NHS, with a major challenge.

Our existing work with BAME populations

For over a decade, Diabetes UK has recruited, trained and deployed Community Champions as volunteers – predominantly from South Asian and black communities. Community Champions reach out and confidently engage with BAME populations to raise awareness of the risks of developing Type 2 diabetes, and to promote better management of the condition. They share information through face-to-face conversations in a variety of community settings and share experiences, stories and relevant materials. These programmes, the majority of which are commissioned by local NHS trusts or clinical commissioning groups (CCGs), have transformed people’s lives, leading to individuals rethinking their attitudes to eating better and moving more. They have also supported the environment where the healthy choice is the easy choice, and supporting individuals to change their behaviour.

Achieving large-scale behaviour change in communities

In the UK, we live in an era of high diversity, where both recent migrants and established ethnic minority populations from many different parts of the world reside, resulting in an unprecedented variety of cultures, identities, faiths and languages. Building on Diabetes UK’s existing work, we want to better understand this level of diversity so that we can get our Type 2 diabetes prevention messages out as far and wide as possible and, while doing so, understand how we can best work with communities to achieve lasting behaviour change.

Whatever we do has to be cost-effective and scalable, given that by 2050, one-third of the UK population will be made up of black, Asian and minority ethnic communities. Awareness to Action is Diabetes UK’s pilot project to do just this. We are taking a focused approach to target the largest ethnic minority group in the UK, in one location, by partnering with the NHS and a local authority, to raise awareness of the increased risk in this population group and to encourage people to take action towards lowering their risk.

Focusing on one population group

Our aim is to reach the Indian, Pakistani and Bangladeshi population aged 25 to 39 in the city of Derby in the East Midlands. Census data informs us that people of these ethnic backgrounds make up 12% of the total population of Derby – approximately 27,000 people. Around 60% of this population is concentrated in two inner city wards: Normanton and Arboretum. We also know from census data that the BAME population across the UK is relatively young, with approximately 30% falling within this age range.

The Awareness to Action initiative is to highlight the fact that people of Indian, Pakistani and Bangladeshi descent are at an increased risk of diabetes from the much younger age of 25. A key message will be that the earlier you know your risk of Type 2, and take action towards a healthier lifestyle, the better the chance of lowering it or preventing the condition altogether. Type 2 diabetes can also develop at lower body mass index (BMI) levels in people of these particular ethnicities, again in comparison with White Europeans. Both genetic and lifestyle factors play a role.

The Know Your Risk tool

Know Your Risk is a simple seven question tool, which helps people to find out their risk of developing Type 2 diabetes. Questions are based on the risk factors for developing Type 2 diabetes and the tool is available both online and for face-to-face administration. A combination of both will be used for the project, to encourage maximum uptake.

Through our prevention activities, we already engage with ethnically diverse populations. However, targeting the 25- to 39-year-old population is rare, if not unique. We need to stop diabetes in its tracks for people who can develop it from this young age. Though it’s never too late to take action, the earlier we do it the better the outcome is. Jit Pundal, an active Community Champion, who raises awareness of the condition across Birmingham and Solihull, told us: “When
I was younger I used to take my Dad to all his diabetes appointments, but at no point did anyone say to me, ‘Do you know you’re at greater risk because your Dad’s got diabetes?’ I wish they had because then I would’ve done something about it. Instead, I developed Type 2 when I was 38 years old. That’s why I raise awareness now, so that people know that there is something that they can do.”

Developing Awareness to Action
We have formed a partnership with NHS Derby and Derbyshire CCG, as well as Derby City Council Public Health, to deliver the project. Through the partnership, we will work with a number of GP practices in the heart of the two wards to support its delivery. The partnership is key to the effectiveness of the project as GP practices can determine the exact level of risk through an HbA1c test and provide relevant advice. This is an important next step for people who find out that their risk of Type 2 falls into the high risk category of the tool.

We will test whether the presence of locally recruited Community Champion volunteers, promoting the Know Your Risk tool and message in community settings, in addition to a bespoke, culturally tailored, marketing and communications campaign in the area, can raise awareness of the increased risk of Type 2 diabetes in this population. The nub of Awareness to Action will be to encourage our target group to find out their risk of diabetes through the Know Your Risk tool and to take the appropriate follow-up action.

Targeting this age group alone is only part of the solution, so we’re doing something different. The approach that we are taking for the Awareness to Action project is rooted in insight which was gathered earlier this year from across the East and West Midlands, from a sample of our target population. We’re combining this with our expertise in raising awareness more widely and of running successful Community Champions programmes. The insight focused on asking questions, such as:

- How might you respond to communications about the risk of Type 2 diabetes?
- What are the blockers and barriers to taking action?
- What kind of information should we provide that resonates with them?
- What communications channels should we use?

We heard loud and clear that communications must be intergenerational in order for us to reach our goals. This means adopting a ‘pincer’ approach to reaching, engaging and bringing our target population to the Know Your Risk tool. Hence our secondary target is people aged 50 plus from the same ethnic backgrounds.

Key to achieving an attitudinal shift within the South Asian community is to get conversations started within families, across generations, so that those living with diabetes open up about what it’s like, and talk to their children or grandchildren – who are at increased risk due to family history. In this way, these younger family members will become aware of the seriousness of the condition and take steps to prevent it. We’re driven to do this, as we know that...
50% of cases of Type 2 diabetes are preventable. We also learnt that there is very little awareness among Indian, Pakistani and Bangladeshi people of the increased risk of diabetes from 25 years old, and that people think this is something that affects people much later on in life, rather than at this age.

A sense of inevitability about developing Type 2 diabetes was also very apparent, with the majority of participants knowing a family member, friend or someone in their community living with diabetes. It was also clear that it’s a topic that isn’t discussed, but can be frequently swept under the carpet, even where a family member is trying to manage the condition, often without sharing the anxiety and fears it raises with their loved ones. On a positive note, however, it is also evident that attitudes are changing, particularly among second and third generation South Asians, who seem to be more knowledgeable about the condition and are open to talking about it.

The Awareness to Action project has a tailored new approach to engage this population. The messaging and concept is focused on case studies from the local area, including individuals and families affected by Type 2 who are the same ethnicities as our target group, a local celebrity ambassador and a GP. We’re using a variety of channels, including targeted social media with key messages and a link leading to the Know Your Risk tool. Alongside this, there will be highly targeted posters in the wards of Normanton and Arboretum. As well as engaging with local press and radio, we are also working with voluntary and community organisations, appealing to many via Community Champions, who will be active in the project area, ensuring that we deliver grass-roots messages to communities. Community Champions will spark important conversations and help to spread the word at local events, functions or places of worship. Word of mouth will be key to the Awareness to Action project, in order to build the trust and engagement we need to ensure its success.

What does Diabetes UK hope to gain from this?

Diabetes UK has a clear goal: to learn the most effective way in which we can reach into ethnically diverse populations to spread the message that Type 2 diabetes can be prevented or delayed. By working with the NHS and Public Health, our desire is to develop a method to transform existing attitudes and beliefs within communities that Type 2 diabetes is inevitable, to individuals feeling empowered by the message that lifestyle changes can make the difference in preventing or delaying this serious health condition, and that they can take decisive action. We aim to create a partnership model that, with some variations, can be applied across a range of BAME populations to help reverse the diabetes epidemic that we currently face.

The Awareness to Action project will be delivered in Derby from September 2019. Further information and progress will be published in subsequent issues of Update. In the meantime, if you would like more information, please contact farhana.darwich@diabetes.org.uk

REFERENCES
ONE SIZE DOES NOT FIT ALL: ETHNICITY AND THE BIOLOGY OF TYPE 2 DIABETES

Although we’re increasingly aware of the extent of ethnic differences in Type 2 diabetes risk, we don’t fully understand the reasons why. This knowledge is critical if we are to provide the best care and find the most effective ways to tackle this increased risk. Diabetes UK research fellow, Dr Louise Goff, is working to fill this gap and understand the exact causes of Type 2 diabetes in Black African people. Here she explains how she and her colleagues are investigating the accepted route to Type 2 diabetes and asking if it is the same in Black African men.

By the age of 80, it’s estimated that half of all people of South Asian, African and Caribbean descent will develop Type 2 diabetes – twice as many as White Europeans. Particularly striking is the earlier onset of the condition, with the average age of diagnosis 10 to 12 years younger in African people compared with White Europeans. Previous research has suggested that black people have higher insulin resistance and that it’s this insulin resistance that drives their higher risk of Type 2 diabetes. But these studies have chiefly relied on methods that estimate, rather than directly measure, insulin sensitivity. Dr Goff explains: “The indirect measures don’t apply well to black populations. So we used very sophisticated techniques to overcome this.”

Dr Goff and her team at King’s College London compared insulin resistance in men with Type 2 diabetes, 18 of whom were Black African and 15 of whom were White European. They gave the men fixed doses of glucose over a four-hour period and then examined how much insulin the participants produced in response to the glucose. They also looked at how their bodies processed glucose and fat, as well as their liver, muscle and fatty tissue specifically. Finally, participants had MRI scans to assess their internal fat levels.

**Reversing the arrows**

The researchers were expecting the Black African men to have greater insulin resistance, as found in previous studies. But there were no differences between the two groups. Past research had also linked higher levels of internal fat to high insulin resistance. But, again, this link wasn’t found: Black African men had lower levels of internal fat on average and internal fat was not linked to high insulin resistance.

“Type 2 diabetes may develop in ‘reverse order’ in black populations: where high levels of insulin lead to insulin resistance.”

“The textbooks tell us that insulin resistance develops because of visceral fat. Insulin resistance then causes higher levels of circulating glucose in the blood, and this leads to Type 2 diabetes. We’ve shown that while that’s true in white populations, this sequence doesn’t apply in Black African men. Insulin resistance is not the chief cause of their Type 2 and what’s happening in fat isn’t related,” says Dr Goff.

These new findings suggest that Type 2 diabetes may develop in ‘reverse order’ in black populations: high levels of insulin lead to insulin resistance.

**The right approach, for the right person**

These findings could have significant implications. “People of Black African origin might be getting poorer care, because we’re applying what we’ve learnt from white populations to everyone. Many approaches to treating or preventing Type 2 diabetes focus on tackling insulin resistance, but if this isn’t a driving factor for Black African people, then targeting this isn’t going to be as effective,” Dr Goff explained. There’s still more to understand, but this work flags an urgent need for further research into how Type 2 diabetes develops in people of different ethnicities, so we can move towards more tailored treatment and prevention strategies.

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